BLUEGREEN ALLIANCE

New Clean Car Standards: A Job Creator for America and Michigan

The Obama administration has proposed new performance standards for light-duty vehicles (cars and light trucks) that will require automakers to introduce increasingly fuel efficient and lower polluting cars. The new standard requires each carmaker to achieve an average fleet performance equivalent to 54.5 miles per gallon (mpg) for 2025, which will require an annual increase in fuel efficiency of about 4 mpg annually.

The BlueGreen Alliance's research report ***Gearing Up***[1] estimates that the proposed standards will create approximately 570,000 jobs nationwide by 2030. The new standards will help U.S. consumers save billions of dollars at the pump, and consumers are expected to use these fuel savings to purchase new goods and services, boosting the U.S. economy and driving job creation.

In Michigan, our research suggests that new fuel economy standards will create 20,000 new jobs by 2030.[2] This is similar to results found by a previous study, which estimated that an additional 22,600 jobs will be created in Michigan by 2030 as a result of the policy.[3]

By 2030, we estimate that the proposed standards will save drivers of passenger cars and light trucks approximately $61 billion dollars per year on their gasoline bill, even after accounting for the slightly higher purchase price of more fuel-efficient vehicles. By the time the proposed standards have fully taken effect in 2025, they will save consumers an estimated $4,000 dollars over the life of a vehicle.[4] These job gains and net fuel savings only reflect the impact of the standards proposed for the years 2017-2025. If the standards already in place for the year 2012-2016 were considered, the total fuel savings and employment benefits would be even greater.

Our national results in ***Gearing Up*** indicate that the new proposed standards will lead to the nationwide creation of 50,000 jobs manufacturing light-duty vehicles and their components by 2030. As a state that has already attracted a number of companies that are part of the clean vehicle manufacturing supply chain, Michigan is sure to get a good amount of these new manufacturing jobs.

Michigan is already home to thousands of vehicle manufacturing jobs producing clean vehicle technologies. Currently about 38,000 Michigan residents are involved in the manufacture of technologies that deliver greater fuel efficiency, out of more than 130,000 jobs in light-duty vehicle manufacturing (parts and assembly).[5]

Case Studies

Magna E-Car and Dow Kokam are two examples of thriving businesses in the supply chain for cleaner vehicles. They also illustrate the important role strategic government support has had in nurturing new business success.

Magna E-Car Systems is a supplier of components for electric vehicles, with manufacturing and engineering facilities in both the United States and Europe.[6] In the United States, the company operates three facilities in Auburn Hills, Rochester Hills, and Grand Blanc, Michigan. A total of 400 workers are employed at the Grand Blanc manufacturing facility and the Auburn Hills and Rochester Hills technical centers in Michigan.[7] The Grand Blanc facility was opened in 2012 with financing from several sources, including a Department of Energy (DOE) grant through the American Recovery and Reinvestment Act (ARRA) and state tax credits from Michigan. The plant employs approximately 100 workers manufacturing electric motors, converters, powertrain controllers, and battery management systems for hybrid and electric cars. Magna E-Car expects to ship 40,000 components in 2012, increase that number to 500,000 by the end of 2013, and reach full capacity by 2017.[8]

Gary Meyers, vice-president and general manager of the Grand Blanc facility, explains that the company produces "a number of components, virtually anything necessary to make an (electric vehicle) or a hybrid electric vehicle." Company CEO Kevin Pavlov says the company products "are focused on what I would call a primary technological solution to improving fuel economy and improving performance and safety around vehicles that are coming in the next generation." If the company succeeds in reaching full capacity as planned, it may create additional jobs for Michigan residents over the next several years, as well as contribute to the development of clean vehicles as an electric components supplier.

Dow Kokam, a producer of advanced energy storage technologies, announced in December 2011 that its new 400,000 square foot lithium-ion battery manufacturing plant in Midland, Michigan is scheduled to begin production in 2012.[9] Once the plant is operational, Dow Kokam plans to hire local workers and create new employment opportunities in the area, including jobs for local graduates of the Delta College Fast Start advanced battery training course. "The Great Lakes Bay Region has a talented and motivated workforce, and it is a top priority to train and hire workers from the area to make Midland a focal point of next-generation battery manufacturing," says company Vice President David Pankratz.

As of December 2011, building the plant has required 650,000 manufacturing hours for construction, and over 90 percent of these construction jobs have already gone to Michigan residents. Dow Kokam plans to initially employ 320 workers at the facility when it opens in 2012, and to create about 800 permanent jobs by the time the plant reaches full capacity.[10]

As a joint venture between the Dow Chemical Company, lithium-ion battery manufacturer Kokam America, and battery pack research company Dassault SVE, Dow Kokam is in a very good position to build advanced battery cells and battery packs to power cleaner and more efficient hybrid and electric vehicles. Dow Kokam has been able to construct the Midland plant with funding from several sources, including a DOE grant through the American Recovery and Reinvestment Act (ARRA), Michigan state tax credits and grants, and a Michigan Renaissance Zone that will allow Dow Kokam development to remain tax-free for 12 years.[11]

Conclusion

Overall, the proposed standards will result in a more robust economy that is less vulnerable to energy price spikes, and a stronger auto industry building the cleaner cars that are increasingly in demand. In addition to these economic benefits, the new standards will also deliver other valuable benefits: they will reduce Michigan and the nation's dependence on foreign oil and help shield our economy from volatile world oil markets; and they will deliver reduced air pollution. The new standards will also help American auto makers compete in other global auto markets that are increasingly demanding more fuel-efficient vehicles.

Michigan residents should not only support the new standards requiring more fuel-efficient vehicles; we need a comprehensive approach to ensuring more advanced vehicles and their supporting technologies are manufactured in Michigan. There is an immediate need for the Department of Energy to process and disperse funding already allocated to the Advanced Technology Vehicle Manufacturing Program. Policies that support greater industrial energy efficiency will also assist international competitiveness, by lowering long run energy costs and reducing exposure to energy fuel spikes.

1. Full report Gearing Up: Smart Standards Create Good Jobs Building Cleaner Cars, see: www.bluegreenalliance/GearingUp

2. We use the national job impacts in Gearing Up to estimate state level impacts. We use the fact that savings on fuel is the main driver of job creation due to the rule. We assume that job gains in each state are proportional to fuel savinga nd that fuel savings are proportional to fuel use adjusted by the mix of light-duty vehicles within the overall vehicle fleet.

3. Ceres (2011). More jobs per gallon: How strong fuel economy/GHG standards will fuel American jobs. Washington, D.C.: Management Information Services, Inc.

4. Environmental Protection Agency and Department of Transportation. (2012). "Draft regulatory impact analysis: proposed rulemaking for 2017-2025 light-duty vehicle greenhouse gas emission standards and corporate average fuel economy standards." (Docket: EPA-420-D-11-004). Washington, DC.

5. Data on employment in clean vehicle technology manufacturing from NRDC's Supplying Ingenuity (http://www.nrdc.org/transportation/autosuppliers/files/SupplierMappingReport.pdf). Data on light duty-vehicle manufacturing in Michigan is most current data from Bureau of Labor Statistics, April 2012.

6. Magna International Inc., "About Magna E-Car Systems," < http://www.magna.com/capabilities/hybrid-electric-vehicles-systems/about-magna-e-car-systems>

7. "Magna E-Car opens Grand Blanc plan to build vehicle parts," Detroit Free Press, 16 April 2012, <http://www.freep.com/article/20120416/BUSINESS01/120416066/Magna-E-Car-opens-Grand-Blanc-plan-to-build-hybrid-electric-vehicle-parts>

8. Sarah Schuch, "Magna E-Car Systems' hundreds of jobs 'good for the whole community, for Genesee County'," Michigan Live, 16 April 2012, <http://www.mlive.com/business/mid-michigan/index.ssf/2012/04/grand_blanc_township_superviso_2.html>

9. "Dow Kokam Midland Battery Park Construction on Schedule for 2012 Opening," Kow Kokam, 25 January 2012, <http://www.dowkokam.com/news_2011_12_14-english.php>

10. Howard Lovy, "Dow Kokam Brings New Energy to Alternative Vehicle Industry," Mid Michigan's Second Wave, 7 June 2011, <http://midmichigan.secondwavemedia.com/features/dowkokam6711.aspx>

11. Tony Lascari, "Biden Boosting Battery Power in Midland at Dow Kokam Groundbreaking," Midland Daily News, 21 June 2010, <http://www.ourmidland.com/news/article_df8ad333-fcb4-5ccf-9549-d8f9287200de.html>